DOCUMENT RESUME

ED 224 407 HE 015 717

AUTHOR	Jenkins, Robin E.; Nord, Roy
TITLE	Contracting for Services.
INSTITUTION	National Association of Coll. and Univ. Business Officers, Washington, D.C.
SPONS AGENCY	Lilly Endowment, Inc., Indianapolis, Ind.
PUB DATE	Nov 82
NOTE	7p.; Excerpt from a book entitled "Contracting for Services."
AVAILABLE FROM	National Association of College and University Business Officers, One Dupont Circle, Suite 510, Washington, DC 20036 (entire book at $25.00).
PUB TYPE	Guides - Non-Classroom Use (055) -- Collected Works - Serials (022)
JOURNAL CIT	Business Officer; p15-19 Nov 1982
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Ancillary School Services; Bids; *Campus Planning; *College Administration; *Contracts; Cost Effectiveness; Decision Making; *Delivery Systems; Educational Facilities Planning; Evaluation; Higher Education; Performance

ABSTRACT

The major steps a college should undertake in contracting for services, including the initial determination as to whether or not contracting is the best way to provide a particular service, are described. Three general activities that apply to decisions about contracting in most circumstances are: investigating service characteristics; identifying service objectives; and defining performance standards. Performance specifications for most services required by a college could include a schedule of work; a list of materials and/or equipment to be provided by the contractor or institution; and facilities that will be available for performing the service. The next phase includes the activities necessary to evaluate the relative merits of feasible service delivery alternatives and select to the most appropriate one. In making this determination, it is important to evaluate the cost-effectiveness and quality of the services offered under each alternative. The effects of different alternatives on employees, including student workers; on the cohesiveness and integrity of the campus community; and on current collective bargaining agreements must also be considered. The third phase deals with issues that must be resolved to ensure that the specific alternative chosen is best from the institution's point of view, and that the selection process itself is open and fair. In selecting a contractor, it is important to develop a service budget, prequalify bidders, develop a request for proposal, solicit bids, and evaluate the proposal. The final phase encompasses the development and negotiation of the contract documents, administration of the contract, and periodic evaluation of the contractor's performance. (SW)

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
✓ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
NACUBO
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED224407

HE 015 717

Contracting for Services

by ROBIN E. JENKINS and ROY NORD

Consideration of the option to contract for a service may result from one or more factors, including: (1) dissatisfaction with an in-house service or with an existing contract, (2) the recognition that certain institutional needs are not being met, (3) the desire to expand or improve a service that currently is minimally acceptable, or (4) the desire to test, by comparison, the efficiency, economy, or quality of an in-house service.

This chapter describes the major steps of the contracting process, including the initial determination as to whether or not contracting is the best way to provide a particular service. For purposes of clarity, these steps are grouped into four primary "phases" of the overall process.

Phase I: Establishing a Decision Framework

Step 1 Investigate Service Characteristics
Step 2 Identify Service Objectives
Step 3 Develop Performance Specifications

Phase II: Evaluating Service Delivery Options

Step 4 Identify Various Combinations of Service Delivery Options
Step 5 Identify All Constraints on Service Delivery Options
Step 6 Compare Costs of Service Delivery Options

Phase III: Selecting a Contractor

Step 7 Develop Service Budget
Step 8 Prequalify Bidders
Step 9 Develop Request for Proposal
Step 10 Solicit Bids
Step 11 Evaluate Proposal

Phase IV: Negotiating and Managing the Contract

Step 12 Develop the Contract
Step 13 Negotiate the Contract
Step 14 Administer the Contract
Step 15 Evaluate Contract Performance

Establishing a Decision Framework

Phase I attempts to answer four questions:

(1) In what respects can (or should) current services be improved?

(2) What improvements are feasible, given financial, regulatory, and other limitations?

(3) What constraints on possible service delivery mechanisms are imposed by the institution's perception of the role and purpose of the service in question?

(4) How can the quality of service performance be judged objectively?

The methods used to answer these questions depend on the characteristics of the particular service and on a variety of institutional characteristics, including mission, governance, organization and management, size, and location. However, there are three general activities that apply to decisions about contracting in most circumstances. These are (1) investigating service characteristics, (2) identifying service objectives, and (3) defining performance standards.

Step 1: Investigate Service Characteristics. To determine the best way of improving a service, it is first necessary to have a clear understanding of: (1) needs the service is intended to address and (2) operational and financial characteristics of the means by which the service is currently being provided. Such an understanding helps to suggest alternatives to current practices. For example, if the

Robin E. Jenkins is a senior accountant at George Washington University. Previously, she was senior program manager for NACUBO. Roy Nord was a consultant to NACUBO. This article is excerpted from Contracting for Services, *being published this month by NACUBO.*

This article is excerpted from *Contracting for Services,* being published by NACUBO. The book was developed under a grant from the Lilly Endowment, Inc. A steering committee of persons with much experience in contracting for services supervised the development of the book and counseled the staff and authors. Robin E. Jenkins, former senior program manager for NACUBO, directed the project.

The members of the steering committee are: Gaetano Russo, *chairman,* University of Missouri; Irene Bluth, San Mateo Community College District; Kenneth Brown, Millikin University; Alan Heyneman, The University of Rochester; J. Leslie Hicks, Jr., Denison University; and Richard Mooney, University of California, Los Angeles.

Contracting for Services is available for $25 from NACUBO, One Dupont Circle, Suite 510, Washington, D.C. 20036. An order card is included in the center of this issue for your convenience. Purchase orders are accepted from member institutions only.

service being examined is security, investigation may reveal that alternative ways to reduce crime on campus include the improvement of student orientation procedures and installation of an emergency telephone system as well as augmenting security patrols.

An additional purpose of investigating service characteristics is to reveal any regulatory, contractual, or other constraints that may limit service alternatives. For example, union contracts may exist whose provisions affect the institution's ability to contract for certain services.

The investigation may include examination of financial documentation and audit reports; interviews with service managers, staff, and users; and discussions with providers of the service on other campuses. In some cases, it may be useful to employ a consultant to provide an objective evaluation of current practices and assist in identifying feasible changes in those practices. An additional tool, which is sometimes used to provide information on the range and feasibility of alternatives, is a "Request for Information" (RFI). This document, while usually employed in the prequalification of contractors, can be used to solicit information from contractors on the probable costs, quality, and limitations of a variety of contracting options.

Step 2: Identify Service Objectives. Service objectives are concise statements of intended results that can be achieved and verified. Their primary functions are to provide a reference point for deciding whether or not a service alternative will effectively serve the needs and desires of the institution; to serve as a basis for developing detailed performance specifications; and to lay the foundation for evaluating service quality and cost-effectiveness.

The development of objectives for a specific service should take place within a larger planning context. The institution's mission and long-range plans, its short-term goals, requests for new services or service improvements, and gaps or duplications in present services must all be taken into consideration. An example of a larger issue could be that part of a given institution's mission is to provide a job for every student who seeks work. This could be important in setting objectives for custodial service, for instance, if a certain percentage of students is hired to perform custodial work.

Labor relations and unionization on campus also affect the determination of objectives for a service since, in many cases, the chosen delivery method will have a substantial effect on current employees of the institution.

Once a service has been placed in the perspective of the institution's overall plan, a statement of objectives can be developed. The statement should provide:

- A clear understanding of the needs that the service is to address.
- A definition of desired results that are (a) attainable, (b) can be evaluated objectively, and (c) if achieved, will be accepted as contributing to institutional goals.

If, as is often the case, service objectives are interconnected or contradictory, the statement of objectives should also include an indication of priorities among competing goals.

In general, service objectives should focus on results, rather than on techniques for achieving results. For instance, the goal of reducing the incidence of assaults on campus is more useful as an objective than that of reducing the response time to reports of assaults, since the first of these addresses directly a result (reduced frequency of assault), while the latter deals with a particular means of accomplishing that result (by reducing response time).

Ideally, service objectives should be sufficiently clear and detailed to provide a sound basis for developing performance specifications. For example, in the case of custodial services for a new facility, the service objectives may initially be stated in terms as simple as keeping the floors, walls, and furnishings clean and in good repair. Once these broad statements have been made, however, terms should be refined by clarifying what is meant by "clean" and "in good repair."

Step 3: Develop Performance Specifications. Performance specifications are precise descriptors of the standards by which the effectiveness of a service can be measured. They focus more frequently on the ways in which a service is accomplished than on the desired results of the service. Managers should take great care to prepare specifications as clearly as possible and to include sufficient detail, so that a potential service provider, whether in-house staff or a contractor, will know exactly what is required. Specifications should also be consistent—that is, the same standards should apply regardless of whether the work is performed in-house or by a contractor.

Standards defined by performance specifications serve as tools to measure the quality and effectiveness of both the service and the service provider. Two types of performance specifications may be used: "mandatory" and "desirable."

Mandatory specifications describe tasks or operations considered essential to the delivery of a service. If bids are accepted for a service, managers should insist that mandatory specifications be met. If a contract is already in effect, it usually may be terminated for failure of the contractor to meet these specifications.

Desirable performance standards, on the other hand, describe tasks or operations that a manager would like to have performed but that are not required for minimally acceptable results. The use of desirable performance standards, in addition to those that are mandatory, can broaden the range of criteria by which competing service delivery options are judged.

Some performance standards, such as submission of a necessary report, cannot be both "mandatory" and "desirable" at the same time. However, certain standards that deal with repeated tasks, such as a stated num-

Exhibit 1: Sample Performance Standard

Service Objective: Reduce the incidence of assaults on campus to 75% of last year's average monthly rate by the end of this academic year.

Mandatory Performance Specifications	Desirable Performance Specifications
A campus patrol must cover the campus via established routes traveled in random order so as to provide a minimum of three coverages per hour during hours between _____ and _____.	Regular patrols should be augmented by extra patrols in identified "trouble" areas, as determined by the Watch Commander.

ber of cleanings a week, may be both mandatory (if a minimum is established) and desirable (if more is better). Another example is provided by the incidence of crime on campus, as indicated in Exhibit 1.

Performance specifications for most services required by a college or university could include a schedule of work; a list of materials and/or equipment to be provided by the contractor, if that option is being considered; materials and/or equipment to be provided by the institution; facilities that will be available for performing the service, if any; the desired labor force, which could include names of supervisors and numbers of employees; any graphic material, such as charts or maps, to help clarify written specifications; and a detailed list of tasks or operations to be performed, including both mandatory specifications and those that are merely desirable.

Managers may use a variety of data in developing performance specifications, including established industrial and professional standards and information gained from consultation with experts in the service area. If service needs are complex or unfamiliar, potential contractors may assist both with determining performance specifications and in providing information that may help a manager decide whether or not to contract for the service. A "Request for Information" may be useful for this purpose.

Evaluating Delivery Options

Phase II includes the activities necessary to evaluate the relative merits of feasible service delivery alternatives and select the most appropriate one. The questions to be answered during this phase of the process include:

(1) Should the service be performed in-house?

(2) If so, how should it be organized and managed?

(3) Should the service be contracted, or should some combination of contracted and in-house provision be employed?

(4) If the option to contract is selected, what is the range of acceptable contract provisions?

(5) Should the service be eliminated?

The answers to these questions require a careful comparison, using the information developed in Phase I, of the cost-effectiveness and quality of the services offered under each alternative. The effects of different alternatives on employees, including student workers; on the cohesiveness and integrity of the campus community; and on current collective bargaining agreements must also be considered.

To insure that sound decisions are made, or that an appropriate mix of internally provided and externally contracted delivery methods are used, the following tasks should be performed.

Step 4: Develop a list of all the various combinations of service delivery methods that meet the service objectives.

Step 5: Identify any institutional, governmental, or other constraints that may prohibit certain mixes of contracted and in-house delivery methods. Such constraints could include laws and regulations, institutional policies, labor agreements, capacity of the institution to provide required technical or managerial expertise, and existence of available resources. Consideration of possible constraints may result in revising the list of alternatives for delivering the service.

Step 6: Compare the costs (on a per-unit-of-service basis, if possible) among all alternatives. To the extent possible, this comparison should be weighted to account for variations in quality and other nonpecuniary characteristics of the alternatives. In cases where the service area being evaluated is complex or when there are large variations in quality, a rigorous cost-benefit analysis may be called for. If the expected flows of expenditures and revenues under different alternatives extend over long periods and are not contemporaneous with each other, present value analysis should be used for the comparison.

Selecting a Contractor

By the conclusion of Phase II, a decision should have been made as to whether contracting or performing a service in-house is the most desirable option. Phase III deals with issues that must be resolved to insure that the specific alternative chosen is best from the institution's point of view, and that the selection process itself is open and fair.

Step 7: Develop a Budget. The budget is an essential tool for the contract administrator; it must be both complete and realistic. The estimated costs of services and materials on which the budget is based should reflect actual market prices. Contingencies should be provided for, to the extent possible.

Step 8: Prequalify Bidders. In many instances, it is helpful to prequalify contractors before asking them to submit detailed proposals. This step is especially important for institutions, such as many public colleges and universities that are required to accept low bid. Prequalification can help determine which potential contractors are capable of performing the type and quality of service the institution desires. The procedure can also indicate the reliability of a given firm.

A widely used method of prequalification is the notification of all potential contractors by a "Request for Information" (RFI). The RFI explains the objectives of the proposed service; states the proposed budget, time frame, and performance specifications; describes procedures for responding to the RFI; and elicits certain information about the potential contractor.

The response required by an RFI is much less detailed than that necessary for a formal proposal. In addition to helping an institution distinguish between qualified and unqualified potential contractors, the RFI may provide information needed to refine, clarify, or revise performance standards before developing the "Request for Proposal."

The prequalification process may include the following activities:

(1) Consultation with the institutions where the contractor has worked or is working, including site visits, when possible. How well satisfied are these institutions with the contractor?

(2) Interview with the contractor's on-site supervisors at other locations to determine the quality of workers employed by the contractor.

(3) Review of contractor's work-evaluation method. Does the firm have established standards? A written inspection system?

(4) Review of the contractor's salary schedule (if made available) to determine if supervisory and work salary is competitive with others in the area.

(5) Review of contractor's personnel training program. Is training conducted at all levels, from managerial on down?

(6) Examination of equipment and methods used by the contractor. What research, if any, is being conducted by the contractor on equipment, materials, and supplies?

(7) Survey of the central office setup of the contractor. Can he or she be reached at any time? Is the firm a one-person operation?

(8) Investigation of the firm in Dun and Bradstreet.

(9) Review of the contractor's workload. Is he or she already overloaded?

(10) Determination of the contractor's flexibility. Can the firm meet problems and provide extra personnel in an emergency?

(11) Determination of possible contract payment arrangements.

(12) Review of contractor's experience. Has he or she had any previous experience on a college or university campus?

(13) Investigation of the length of time the contractor has been in business, both nationally (if it is a national organization) and locally.

It should be stated that the development, solicitation, and evaluation of responses to an RFI may require a considerable investment of staff time and resources. If the option exists to issue an RFP without the first step of prequalification, an institution may wish to weigh carefully the value of prequalification before adopting this step.

Step 9: Issue a Request for Proposal. The instrument by which detailed proposals for performing the service are solicited is the "Request for Proposal" (RFP), a detailed communication to qualified and interested contractors, which explains in specific terms the services that the institution requires. The RFP is intended to encourage open, fair competition; to elicit proposals that provide a complete, concise description of a contractor's plan for providing the desired services and of the firm's capacity to effectively pursue the plan; and, finally, to protect the institution's financial and legal interests.

The amount of detail and the specific contents of the RFP vary, depending on the nature of the services sought and the context within which the contracting process takes place. In general, however, the RFP should include the following:

(1) Mandatory and desirable performance standards.

(2) General and special conditions or terms under which the contractor and owner will operate. An example of special terms might be that a service is to be provided at more than one campus and separate price quotations are required for each campus.

(3) Timetable for performance of the service being contracted.

(4) Format and procedures for submitting a proposal, including requirements for style and content.

(5) Schedule and methodology for review of proposals and selection of a contractor.

(6) Address to which proposals must be sent, deadline for proposal submission, name and telephone number of a contact person, and any special instructions such as bid opening date, scheduling for campus visits by contractors, and prebid conferences.

(7) Criteria by which competing proposals will be evaluated.

In addition to the above, it is often helpful if the RFP includes a copy of the proposed contract.

Step 10: Solicit Bids. If bidders have been prequalified, the actual solicitation of bids simply means mailing the RFP to firms on the bidding list. Otherwise the methods for identifying potential contractors described in the section on prequalification can be used. However, the institution should be prepared for additional activities that can help in eliciting complete, useful proposals from potential contractors. Such activities may include provision for site visits by contractors; prebid conferences, if necessary; and possible clarification of RFP provisions. (Copies of material prepared for clarification purposes should be distributed to all prospective contractors to avoid either apparent or real partiality.) Usually, at least four to six weeks should be allowed for bidders to prepare a proposal.

Step 11: Conduct Proposal Evaluation. The best way to insure that evaluation of competing proposals is both rational and impartial is to develop a set of proposal evaluation criteria prior to the opening of bids. These criteria should be consistent with service objectives and performance specifications, but should provide some additional "yardstick" by which to measure the merits of different proposals. Perhaps the simplest form of evaluation criteria are those that specify that the lowest bidder who meets all specifications and demonstrates the ability to perform will be selected. Cost alone, however, is often insufficient as a basis for choosing from among competing proposals. The amount of detail and the precision required of evaluation criteria vary, depending on the complexity of the service, the duration of the contract, and the method selected to choose among proposals.

In general, evaluation criteria should address four major issues: (1) technical compliance, or the extent to which the proposal indicates an intention to comply with both mandatory and desirable performance standards; (2) legal compliance, or the extent to which the proposal indicates acceptance of legal requirements of the contract; (3) capacity, or the extent to which the contractor demonstrates the ability to provide the facilities, equipment, staff, and management expertise for the job; and (4) economic performance, or the proposed price and reimbursement terms.

Weighting and scaling mechanisms. In cases where evaluation criteria are numerous or complex, it may often be necessary to assign numerical weights to each criterion and/or develop a scaling mechanism that allows each to be assigned a numerical score in accordance with the extent to which it satisfies each criterion. Weighting and scaling mechanisms are useful because they provide a means of ranking the competing proposals that is consistent as well as sensitive to differences in the relative importance of different evaluation criteria. Care should be taken, however, to insure that the results of this type of evaluation scheme are not skewed by mathematical quirks in the process of compiling or aggregating the results. Because substantial literature on scaling methods is generally available, this book does not attempt to assess the strengths and limitations of alternative approaches.

Essential aspects of the evaluation process. There are three basic aspects of the evaluation process:

(1) It should be demonstrably impartial. This implies that all proposals remain sealed until the group responsible for evaluation meets, when all bids should be opened.

(2) It should result in a selection that is consistent with evaluation criteria.

(3) It should meet the demands imposed by the institutional and legal setting within which the service is to be provided. This implies that the process should be sufficiently flexible for both the decision and the process by which it is made to be acceptable to members of the institutional community.

When the evaluation is completed and the successful applicant has been selected, notification should be sent to all contractors who submitted proposals. Notification to unsuccessful

bidders should include appropriate recognition of the time and effort expended to develop a proposal.

Negotiating and Managing The Contract

This final phase encompasses the development and negotiation of the contract documents, administration of the contract, and periodic evaluation of the contractor's performance.

Step 12: Develop the Contract. The purpose of a contract is to document the way in which business will be conducted between the institution and the contractor. A contract should present the expectations of an institution in clearly worded, legally enforceable terms and provide mechanisms acceptable to both contractor and institution for adapting the terms of the original agreement to contingencies. A contract should also specify the remedies available to either one of the parties in the event that the other breaches any portion of the contract provisions.

A good contract does more than merely describe the job to be done and the price for doing it. Careful drafting of a contract can facilitate performance, mitigate problems of coordination, and enhance the satisfaction of both the institution and the contractor. A properly drafted contract serves, above all, to minimize hidden risks by treating as many contingencies as can reasonably be foreseen.

Business officers should not approach the contracting process expecting that the contractor has all the advantages of experience in dealing with contracts. Service contractors generally rely on boiler-plate types of agreements. If an institution is considering contracting for a particular service, acquisition of such a boiler-plate agreement may be helpful in drafting the contract document, but it should not be used as the basis of the potential contract until it has been reviewed by appropriate officers such as the institution's legal counsel, purchasing agent, and contract administrator.

Step 13: Negotiate the Contract. Contract negotiation may not be legal in some public institutions. In colleges or universities where negotiation is permitted, the need for this procedure may be minor if the proposed contract was well-prepared and was submitted to contractors along with the RFP. Usually, however, some adjustment is necessary to reach a mutually satisfactory agreement. It is important that the institution be responsible for developing the proposed contract, rather than the contractor, since the institution may then begin the adjustment process from an initial position of advantage. Several fundamental rules should govern contract negotiation:

(1) The institution's positions on negotiation issues should appear to be unanimous. Evidence of internal disagreement weakens the position of the institution.

(2) "Fall-back" positions should be developed and agreed on prior to the beginning of negotiations.

(3) The contractor's proposal should not be incorporated in the contract. It should be used only as a reference point in the negotiation.

(4) If possible, negotiations should be conducted on the campus.

Step 14: Administer the Contract. It cannot be overemphasized that a signed contract does not relieve the institution of the ultimate responsibility for quality and quantity of the service provided. For this reason, an institutional officer should be designated as the contract manager.

Administration of the contract includes:

O *Monitoring performance.* This includes regular inspection of the activities performed by the contractor to insure that performance specifications are being met. Inspection also insures accountability and responsiveness to users of the service.

O *Identifying the need for necessary change and managing its implementation in the contract.* This activity is of particular importance in long-term or complicated contracts for which all possible contingencies cannot be identified when performance specifications and contract documents are developed. Explicit procedures should be established for assessing the need for changes and authorizing the implementation of needed contract modifications, in accordance with contract provisions for such changes. The responsibility for overseeing and administering this procedure should reside with the institution's contract manager, but he or she should not be given sole authority to approve changes in the provisions of the contract.

O *Working with the contractor's representative to resolve any problems that may arise.* The contract should include provision for dealing with problems or disputes.

O *Conducting financial review and audits during the course of the contract.* This should be standard procedure and the frequency of such audits should be determined by the duration of the contract and the type and magnitude of the service provided.

O *Administering payments to the contractor.*

O *Terminating the contract, if necessary.*

O *Managing the closeout and surrender of premises and/or equipment at the end of the agreement.*

Step 15: Evaluate the Contract Periodically. Periodic evaluation of the contract should (1) aid in improving the quality and cost-effectiveness of present service provision and (2) provide the basis for an informed decision on the best means of obtaining the contracted service in the future. Evaluation should be scheduled at intervals over the duration of the contract and be based on the objectives and performance standards developed early in the contracting process. ♦

business officer

Newsmagazine of the National Association of College and University Business Officers

♦

Editor
Jeffrey M. Sheppard
Portfolio Editor
David W. Jacobson
Contributing Staff
Darryl Brown, Stephen Foster, Janet Jackley, Maurese Owens Anne Price, Michael Weaver
Executive Vice President
D. F. Finn

NACUBO Board of Directors

President: Herman D. Johnson, *University of California, San Diego*

Vice President: Caspa L. Harris, Jr., *Howard University*

Secretary: Frederick R. Ford, *Purdue University*

Treasurer: Fred S. Vorsanger, *University of Arkansas*

Robert L. Carr, *Office of the Council of State College and University Presidents* (Washington State); Donald Cole, *Western Washington University;* Joe F. Evans, *Washington University;* Donald Hume, *New York University;* Raymond M. Krehel, *Colgate University;* Carroll J. Lee, *University of New Mexico;* Roger D. Lowe, *Wichita State University;* Warren R. Madden, *Iowa State University;* George B. May, *Amherst College;* Charles C. Teamer, *Dillard University;* John L. Temple, *Emory University.*

♦

Business Officer (ISSN 0147-877X) is published monthly by NACUBO, One Dupont Circle, Suite 510, Washington, DC 20036, telephone 202-861-2500. Second-class postage paid at Washington, DC. Of annual membership dues, $30 is for a subscription to *Business Officer.*

© 1982 All material except that appearing in *Portfolio, Columns,* or otherwise restricted may be reproduced for internal distribution if proper credit is given. Unauthorized use is strictly prohibited.